

Amendments to the Claims

Please cancel claims 16, 17 and 24 without prejudice. Please amend claims 1, 2, 4, 9, 13-15, 18, 20, 21, 25-27, and 29-31. The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing

1. (Currently Amended) A method of multicasting messages in a wireless network comprising:

 receiving at a base station processor having a plurality of wireless channels a multicast message addressed to a multicast group having one or more members at a base station processor having a plurality of wireless channels;
 ~~determining a plurality of multicast group members; and~~
 in response to said multicast message, allocating a wireless channel from said plurality of wireless channels wherein the allocated wireless channel is dedicated for the transmission of multicast messages; and

 ~~sending, over one of said wireless channels dedicated to transmitting multicast messages, said multicast message, wherein the same one of said wireless channels is used to send said multicast message to said plurality of multicast group members to said one or more members via said allocated wireless channel.~~
2. (Currently Amended) The method of Claim 1 further comprising receiving said message at each of the plurality of multicast group members via said ~~same~~ allocated wireless channel.
3. (Original) The method of Claim 2 wherein receiving said message further comprises concurrently receiving said multicast message at each of said plurality of multicast group members.

4. (Currently Amended) The method of Claim 1 wherein sending said multicast message is preceded by:
 - ~~selecting, from among said plurality of wireless channels, a multicast channel adapted to transmit said multicast message; and~~
 - sending, via one of said plurality of wireless channels to each of the multicast group members, a paging message indicative of said ~~multicast~~ allocated wireless channel over which to receive said multicast message, wherein said paging message is transmitted simultaneously to each of said multicast group members.
5. (Original) The method of Claim 1 wherein said base station processor is operable to communicate with a plurality of subscriber access units adapted for communication in a wireless network via said plurality of wireless channels and said multicast group members comprise a subset of said plurality of said subscriber access units.
6. (Original) The method of Claim 5 wherein determining further comprises:
 - performing a lookup in a routing table adapted to store entries associating a multicast group with an interface identifier; and
 - performing a lookup in an interface table adapted to associate said interface identifier with at least one of said plurality of subscriber access units, wherein each of said plurality of subscriber access units associated with the same interface identifier comprises said multicast group members.
7. (Original) The method of Claim 6 wherein sending further comprises:
 - performing a lookup in a connection table adapted to store connection identifier entries indicative of an association between at least one of said plurality of wireless channels and at least one of said plurality of subscriber access units.
8. (Original) The method of Claim 6 further comprising:
 - receiving a join group request indicative of at least one of said plurality of multicast group members; and

adding an interface entry in said interface table indicative of an association between said at least one multicast group member indicated in said join group request and said multicast group.

9. (Currently Amended) The method of Claim 8 further comprising:
 - receiving a join group request indicative of at least one other of said multicast group members; and
 - adding an interface entry in said interface table indicative of an association between at least one other of said multicast group members and said multicast group.
10. (Original) The method of Claim 1 wherein determining said multicast group members further comprises:
 - scanning said multicast message; and
 - parsing a group address indicative of a multicast group.
11. (Original) The method of Claim 10 wherein said group address conforms to a protocol and said parsing comprises parsing in accordance with said protocol.
12. (Original) The method of Claim 11 wherein said protocol is the Internet Group Management Protocol (IGMP).
13. (Currently Amended) A system for multicasting messages in a wireless network comprising:
 - a base station processor having a plurality of wireless channels operable to transmit a wireless message, the base station processor configured to:
 - (a) receive a multicast message addressed to a multicast group having one or more members,
 - (b) in response to said multicast message, allocate a wireless channel from said plurality of wireless channels wherein the allocated wireless channel is dedicated for the transmission of multicast messages, and

(c) send said multicast message to said one or more members via said allocated wireless channel; and

a plurality of subscriber access units in communication with said base station processor ~~over a wireless connection and adapted to receive messages via said plurality of wireless channels, wherein said base station processor is operable to receive a multicast message and transmit said multicast message to at least one of said plurality of subscriber access units via one of said plurality of wireless channels dedicated to transmitting multicast messages~~ and said members, the plurality of subscriber access units configured to:

(a) receive said multicast message via said allocated wireless channel, and

(b) forward said multicast message to said members.

14. (Currently Amended) The system of Claim 13 wherein said base station processor further comprises a routing table adapted to store one or more entries indicative of wherein at least one of the entries indicates an association between each of said plurality of subscriber access units and interfaces, wherein said subscriber access units corresponding to the same interface comprise a multicast group the multicast group and a connection identifier.
15. (Currently Amended) The system of Claim 14 further comprising ~~an interface a~~ connection table adapted to store one or more entries indicative of an association between each of said plurality of subscriber access units and a wireless connection channel, ~~wherein each of said subscriber access units in said multicast group correspond to the same interface~~ wherein at least one of the entries indicates an association between the connection identifier associated with the multicast group and a wireless channel in the plurality of channels.
16. (Canceled).
17. (Canceled).

18. (Currently Amended) The system of Claim 14 wherein said routing table further comprises entries including a group address ~~and a corresponding one of said interface IDs~~, wherein said group address is indicative of ~~one of said multicast groups~~ group.
19. (Original) The system of Claim 18 wherein said group address conforms to a predetermined protocol.
20. (Currently Amended) The system of Claim 19 where said predetermined protocol is the Internet Group Management Protocol (IGMP) ~~IGMP~~.
21. (Currently Amended) The system of Claim 14 wherein only the ~~subset of the plurality of subscriber access units in~~ members associated with said multicast group decode said multicast message.
22. (Original) The system of Claim 13 further comprising a scheduler operable to designate which of said plurality of subscriber access units receive said multicast message on a predetermined one of said plurality of wireless channels.
23. (Original) The system of Claim 22, wherein said scheduler is further operable to designate a plurality of subscriber access units to receive said multicast message over the same one of said plurality of wireless channels.
24. (Canceled).
25. (Currently Amended) The system of Claim ~~24~~ 22 further comprising a paging channel in communication with said scheduler, wherein said paging channel is operative to send a paging message to each of said plurality of subscriber access units in communication with members of said multicast group indicative of one of said wireless channels to be used for receiving said multicast message.

26. (Currently Amended) The system of Claim 15 wherein said ~~subscriber access units~~ members are added to said multicast group via a join group message, wherein said join group message is indicative of an additional ~~subscriber access unit~~ member and said multicast group and ~~said base station processor is further operative to store a new entry in said interface table indicative of said additional subscriber access unit and said multicast group.~~
27. (Currently Amended) The system of Claim 15 wherein said ~~subscriber access units~~ members are removed from said multicast group via a leave group message, wherein the leave group message is indicative of a deleted ~~subscriber access unit~~ member and ~~said multicast group and said base station processor is further operative to delete an entry from said interface table indicative of said deleted subscriber access unit and said multicast group.~~
28. (Original) The system of Claim 13 wherein the base station processor is in communication with an Internet gateway operable to transmit messages via a public access network.
29. (Currently Amended) A computer program product having computer program code for multicasting messages in a wireless network comprising:
- computer program code for receiving at a base station processor having a plurality of wireless channels a multicast message addressed to a multicast group having one or more members ~~at a base station processor having a plurality of wireless channels;~~
 - ~~computer program code for determining a plurality of multicast group members;~~
 - and
 - computer program code for, in response to said multicast message, allocating a wireless channel from said plurality of wireless channels wherein the allocated wireless channel is dedicated for the transmission of multicast messages; and
 - ~~computer program code for sending, over one of said wireless channels dedicated to transmitting multicast messages, said multicast message, wherein the same one of said~~

~~wireless channels is used to send said multicast message to said plurality of multicast group members~~ to said one or more members via said allocated wireless channel.

30. (Currently Amended) ~~A computer data signal including~~ An electromagnetic signal encoded to transfer computer program code for multicasting messages in a wireless network comprising:

~~program code for receiving at a base station processor having a plurality of wireless channels~~ a multicast message addressed to a multicast group having one or more members ~~at a base station processor having a plurality of wireless channels;~~

~~program code for determining a plurality of multicast group members; and~~
in response to said multicast message, allocating a wireless channel from said plurality of wireless channels wherein the allocated wireless channel is dedicated for the transmission of multicast messages; and

~~program code for sending, over one of said wireless channels dedicated to transmitting multicast messages, said multicast message, wherein the same one of said wireless channels is used to send said multicast message to said plurality of multicast group members~~ to said one or more members via said allocated wireless channel.

31. (Currently Amended) A system for multicasting messages in a wireless network comprising:

means for receiving at a base station processor having a plurality of wireless channels a multicast message addressed to a multicast group having one or more members ~~at a base station processor having a plurality of wireless channels;~~

~~means for determining a plurality of multicast group members; and~~

means for allocating a wireless channel from said plurality of wireless channels wherein the allocated wireless channel is dedicated for the transmission of multicast messages; and

~~means for sending, over one of said wireless channels dedicated to transmitting multicast messages, said multicast message, wherein the same one of said wireless~~

~~channels is used to send said multicast message to said plurality of multicast group members~~ to said one or more members via said allocated wireless channel.